The impact of health education to reduce needle stick injury among nurses of private hospital in Jordan

ABSTRACT

Background: Needle stick injuries are well known for their occupational negative consequences affecting healthcare workers on both levels. Nurses working in hospital is the most vulnerable group to these hazards; physically and psychologically. In Jordan, needle stick injuries have been briefly explored in few descriptive studies in which none have examined interventions to reduce this problem.

Objective: The objective of the study is to determine the impact of an educational module to reduce needle stick injuries occurrence among nurses of private hospitals in Jordan.

Methods: This is an experimental study using a cluster Randomized Control Trial design among 335 nurses working in four private hospitals in Jordan. The hospitals were allocated into three strategies of health education on prevention of NSIôs using randomization technique. The strategies are social media, audio-visual presentation, and combined social media and audio-visual strategy, and the results were compared to a control group using existing NSIôs prevention strategy.

Results: At baseline, significant differences in injury counts were found between control group and social media group (Mannï Whitney U = 2642, P= 0.013) and between control group and combined group (Mannï Whitney U = 2583, P= 0.002). No significant difference was found between the Audio-visual presentation and the control group at baseline (Mannï Whitney U = 2715, P= 0.095). After three months, significant difference was found in the baseline-adjusted mean 2ndmeasurement NSIôs counts between control group and combined intervention group only (P= 0.002), while the difference was not significant between control group and social media group(P= 0.194) nor between control group and audio-visual presentation group (P= 0.752). After 6 months, significant difference was found in the baseline-adjusted mean 3rd measurement NSIs counts between control group and social media group (P= 0.032), between control group and audio-visual group (P= 0.007), and between control group and combined group (P<0.001).

Conclusion: All three strategies were effective in reducing NSIs after six months of completing the intervention, although only the combined intervention was able to significantly reduce NSIs after 3 months of completing the intervention. Simple technologies like using the social media and audio-visual are effective strategies in providing education beyond traditional workshops and lectures.

Keyword: Needles stick injuries; Experimental study; Randomized control trial; Health education strategy